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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/560,371	04/28/2000	Lucius Gregory Meredith	MS147249.1	3551

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EXAMINER

ROCHE, TRENTON J

ART UNIT	PAPER NUMBER
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2124

DATE MAILED: 03/15/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/560,371

Applicant(s)

MEREDITH ET AL.

Examiner

Trent J Roche

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. Renumbered claims 1-28 have been examined.

Specification

2. The disclosure is objected to because of the following informalities: Page 28, lines 16-17, the context semantics component is referred to as component 480. Fig. 31 indicates that component 480 is a port and message mapping component. For purposes of examination this is interpreted to read "a context semantics component 485...".

Appropriate correction is required.

3. The disclosure is objected to because of the following informalities: Page 29, line 14, portTranslation appears to be misspelled as 'portTranaslation.' For purposes of examination this will be interpreted to read 'portTranslation.'

Appropriate correction is required.

Claim Objections

4. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 7-31 been renumbered 5-28, respectively.

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Consequently, the dependency numbering of claims 9-15, 17-21, 23-25, 27 and 28 require renumbering. For purposes of examination, the claims are being interpreted as such:

Renumbered claim 9 is considered to be dependent on claim 8.

Renumbered claim 10 is considered to be dependent on claim 8.

Renumbered claim 11 is considered to be dependent on claim 8.

Renumbered claim 12 is considered to be dependent on claim 11.

Renumbered claim 13 is considered to be dependent on claim 8.

Renumbered claim 14 is considered to be dependent on claim 8.

Renumbered claim 15 is considered to be dependent on claim 8.

Renumbered claim 17 is considered to be dependent on claim 16.

Renumbered claim 18 is considered to be dependent on claim 16.

Renumbered claim 19 is considered to be dependent on claim 16.

Renumbered claim 20 is considered to be dependent on claim 16.

Renumbered claim 21 is considered to be dependent on claim 16.

Renumbered claim 23 is considered to be dependent on claim 22.

Renumbered claim 24 is considered to be dependent on claim 22.

Renumbered claim 25 is considered to be dependent on claim 22.

Renumbered claim 27 is considered to be dependent on claim 26.

Renumbered claim 28 is considered to be dependent on claim 26.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 7 recites the limitation "the abstract business model" in line 2. There is insufficient antecedent basis for this limitation in the claim. For purposes of examination this will be interpreted to read "the abstract model..."

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 and 22-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The invention as disclosed in independent claims 1, 22 and 26 are directed to non-statutory subject matter. The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful; concrete and **tangible** result." (State Street Bank & Trust Co. v. Signature Financial Group Inc., 149 F.3d at 1373, 47 USPQ2d at 1601-02.)

Specifically, the claims are directed to a method, software and system for associating business workflow and/or processes to components through a binding technique. These steps do not specifically state that they are performed by hardware, and are thus not necessarily tangibly embodied in a computer system. Furthermore, while claim 26 is directed to a system for performing these steps, it does not dictate what type the nature of the system is, more specifically, it does not dictate that it is a computer system including a computer-readable medium for performing the steps

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recited in the claim. Thus, Applicants fail to disclose that the method, software and system are tangibly embodied and executed by a piece of hardware and that their functions have practical applications which produce useful, concrete, and tangible results under the State Street Formulation.

On this basis, independent claims 1, 22 and 26 are rejected under 35 U.S.C. § 101.

Dependent claims 2-7, 23-25, 27 and 28 are also rejected for being dependent on rejected independent claims.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-24 and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by "A Common Object Model Discussion Paper" by the Workflow Management Coalition, hereafter referred to as WMC.

Regarding claim 1:

WMC teaches:

- a method for associating actions of a business workflow process to at least one technological component ("A standardized API model...is provided for communication between software applications and the workflow..." on page 4, section 2)
- providing an abstract model of the business workflow process ("WorkProcess represents an instance of a workflow model..." on page 7, section 2.2.2)

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- breaking the abstract model into at least one executable representing business operations (“the workflow services are modeled as separate, ‘loosely coupled’ domains which each offer a defined range of capability to other workflow services” on page 4, section 2.1.1)
- using a binding separate from the abstract model to link the at least one executable to the at least one technological component (“The ability to establish dynamic bindings with location service between different workflow components or between different workflow services...” on page 8, section 3.1)

substantially as claimed.

Regarding claim 2:

The rejection of claim 1 is incorporated, and further, WMC discloses binding the at least one executable to a plurality of technological components as claimed (“The ability to establish dynamic bindings with location service between different workflow components or between different workflow services...” on page 8, section 3.1. Further, note the Figure on page 15.)

Regarding claim 3:

The rejection of claim 1 is incorporated, and further, WMC discloses a plurality of business operations as claimed (Note the Figure on page 15)

Regarding claim 4:

The rejection of claim 1 is incorporated, and further, WMC discloses binding the plurality of executables to a plurality of technological components as claimed (“The ability to establish dynamic

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bindings with location service between different workflow components or between different workflow services...” on page 8, section 3.1. Further, note the Figure on page 15.)

Regarding claim 5:

The rejection of claim 1 is incorporated, and further, WMC discloses a scheduler that schedules that order of execution as claimed (“An activity work script relates Applications/Participants and work items. Two scenarios are identified: Sequential work-items – the work items are created sequentially and all assigned to the same resource set. Parallel work items – the work items are created and assigned to the participant set for parallel processing...” on pages 13 and 14, section 5.2)

Regarding claim 6:

The rejection of claim 1 is incorporated, and further, WMC discloses binding providing specific information regarding a business implementation as claimed (“to allow the enactment of a single business process across several different workflow systems...” on page 4, section 2.1)

Regarding claim 7:

The rejection of claim 5 is incorporated, and further, WMC discloses using a second binding to utilize the abstract model in a second business implementation as claimed (Note the first figure on page 5)

Regarding claim 8:

WMC teaches:

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- a system for facilitating modeling of business processes comprised of a plurality of business operations (“the workflow services are modeled as separate, ‘loosely coupled’ domains which each offer a defined range of capability to other workflow services” on page 4, section 2.1.1)
- the system comprising a computer-readable medium and a plurality of computer-executable files (“to support client application access to the workflow enactment service from distributed platforms” on page 4, section 2. A computer-readable medium and computer-executable files are inherently present in a distributed platform environment.)
- a scheduling component for defining the flow of business operations (“An activity work script relates Applications/Participants and work items. Two scenarios are identified: Sequential work-items – the work items are created sequentially and all assigned to the same resource set. Parallel work items – the work items are created and assigned to the participant set for parallel processing...” on pages 13 and 14, section 5.2)
- a binding component for defining the business operations (“The ability to establish dynamic bindings with location service between different workflow components or between different workflow services...” on page 8, section 3.1. Further, note the Figure on page 15.)

substantially as claimed.

Regarding claim 9:

The rejection of claim 8 is incorporated, and further, WMC discloses the binding component defining technology specific information as claimed (“The ability to establish dynamic bindings with

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location service between different workflow components or between different workflow services...” on page 8, section 3.1. Further, note the Figure on page 15.)

Regarding claim 10:

The rejection of claim 8 is incorporated, and further, WMC discloses a single business operation being bound to a plurality of technological components as claimed (“The ability to establish dynamic bindings with location service between different workflow components or between different workflow services...” on page 8, section 3.1. Further, note the Figure on page 15.)

Regarding claim 11:

The rejection of claim 8 is incorporated, and further, WMC discloses business operations and actions as claimed (Note the figure on page 12 and the corresponding discussion.)

Regarding claim 12:

The rejection of claim 11 is incorporated, and further, WMC discloses the binding defining message structure and declaring messages as claimed (Note the figure on page 12 and the corresponding discussion. The objects and their relationships are shown, and messages and message structure would inherently be defined in the binding of the objects.)

Regarding claim 13:

The rejection of claim 8 is incorporated, and further, WMC discloses context semantics as claimed (“The ability to establish dynamic bindings with location service between different workflow

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components or between different workflow services...” on page 8, section 3.1. Further, semantics are inherently present in the binding.)

Regarding claim 14:

The rejection of claim 8 is incorporated, and further, WMC discloses schedule conditionals as claimed (“The ability to establish dynamic bindings with location service between different workflow components or between different workflow services...” on page 8, section 3.1. Further, conditionals are inherently present in the binding.)

Regarding claim 15:

The rejection of claim 8 is incorporated, and further, WMC discloses a second binding component as claimed (Note the figure on page 15 and the corresponding discussion.)

Regarding claim 16:

WMC teaches:

- a system for facilitating modeling of business processes comprised of a plurality of business operations (“the workflow services are modeled as separate, ‘loosely coupled’ domains which each offer a defined range of capability to other workflow services” on page 4, section 2.1.1)
- the system comprising a computer-readable medium and a plurality of computer-executable files (“to support client application access to the workflow enactment service from distributed platforms” on page 4, section 2. A computer-readable medium and computer-executable files are inherently present in a distributed platform environment.)

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- a scheduling component for defining the flow of business operations (“An activity work script relates Applications/Participants and work items. Two scenarios are identified: Sequential work-items – the work items are created sequentially and all assigned to the same resource set. Parallel work items – the work items are created and assigned to the participant set for parallel processing...” on pages 13 and 14, section 5.2)
- a binding component for defining the business operations to at least one technological component (“The ability to establish dynamic bindings with location service between different workflow components or between different workflow services...” on page 8, section 3.1. Further, note the Figure on page 15.)

substantially as claimed.

Regarding claim 17:

The rejection of claim 16 is incorporated, and further, note the rejection regarding claim 10.

Regarding claim 18:

The rejection of claim 16 is incorporated, and further, note the rejection regarding claim 11.

Regarding claim 19:

The rejection of claim 16 is incorporated, and further, note the rejection regarding claim 12.

Regarding claim 20:

The rejection of claim 16 is incorporated, and further, note the rejection regarding claim 13.

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Regarding claim 21:

The rejection of claim 16 is incorporated, and further, note the rejection regarding claim 14.

Regarding claim 22:

WMC teaches:

- a business process scheduling software (“to allow the enactment of a single business process across several different workflow systems in different departments...” on page 4, section 2.1)
- an data flow module adapted to allow a user to define the flow of business operations (“ProcessDefinition represents a workflow process model...” on page 7, section 2.2.2)
- a binding module adapted to allow a user to define the link between the business operations and other components (“The ability to establish dynamic bindings with location service between different workflow components or between different workflow services...” on page 8, section 3.1. Further, note the Figure on page 15.)

substantially as claimed.

Regarding claim 23:

The rejection of claim 22 is incorporated, and further, WMC discloses the binding allowing the user to specify the business implementation as claimed (Note the figure on page 7 and the corresponding discussion.)

Regarding claim 24:

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The rejection of claim 22 is incorporated, and further, WMC discloses allowing the user to specify programmable semantics as claimed (Note the figure on page 11 and the corresponding discussion.)

Regarding claim 26:

WMC teaches:

- a system for modeling of business processes comprised of a plurality of business operations (“the workflow services are modeled as separate, ‘loosely coupled’ domains which each offer a defined range of capability to other workflow services” on page 4, section 2.1.1)
- means for defining the flow of business operations (“ProcessDefinition represents a workflow process model...” on page 7, section 2.2.2)
- means for linking the means for defining the flow of business operations to technological components (“The ability to establish dynamic bindings with location service between different workflow components or between different workflow services...” on page 8, section 3.1. Further, note the Figure on page 15.)

substantially as claimed.

Regarding claim 27:

The rejection of claim 26 is incorporated, and further, WMC discloses means for defining the specific business implementation as claimed (“ProcessDirectory is a locator for all Process Definitions within a Business System Domain” on page 7, section 2.2.2)

Regarding claim 28:

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The rejection of claim 26 is incorporated, and further, WMC discloses defining the flow of business operations and the means for linking the means for defining the flow of business operations in separate computer executable files as claimed ("a fully distributed workflow enactment service..." on page 15, section 5.3. In a distributed environment, the definitions will inherently be present in separate computer executable files.)

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over "A Common Object Model Discussion Paper" by the Workflow Management Coalition, hereafter referred to as WMC.

Regarding claim 25:

The rejection of claim 22 is incorporated, and further, WMC does not explicitly disclose the binding being in a programming language having an XML syntax. However, WMC discloses that XML may have a role to play in the ability to transfer a business project as a work object on page 9, section 3.2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an XML syntax in the system disclosed by WMC, as this would give the ability to transfer a business process...as a work object in its own right, as an alternative to an individual activity or workitem, as stated on page 9, section 3.2 of WMC.

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Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

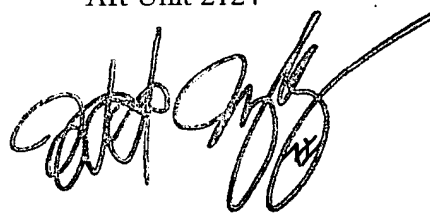
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trent J Roche whose telephone number is (703)305-4627. The examiner can normally be reached on Monday - Friday, 9:00 am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703)305-9662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Trent J Roche
Examiner
Art Unit 2124

TJR

A handwritten signature in black ink, appearing to read 'Todd Ingberg', with a long, sweeping horizontal line extending to the right.

Todd Ingberg
Primary Examiner
Group 2100